

REMARKS

The foregoing amendment and the following remarks are submitted in response to the Office Action issued on April 6, 2005 in connection with the above-identified patent application, and are being filed within the three-month shortened statutory period set for a response by the Office Action.

Claims 1-10 and 12-20 are pending in the present application as amended. Claim 1 has been amended to include subject matter from claim 11, and such claim 11 has thus been canceled. Claims 2-10, 12-15, and 17-19 have been amended to re-characterize same as computer-readable medium claims. New claim 20 has been added based on various of claims 1-10 and 12-15. Applicant respectfully submits that no new matter has been added to the application by the amendment.

The Examiner has objected to dependent claims 2-10, 12-15, and 17-19 as being of improper dependent form for the reason that such claims recite subject matter of a different statutory class as compared with the independent claims from which such dependent claims depend. In addition, the Examiner has rejected such claims 2-10, 12-15, and 17-19 under 35 USC § 112, second paragraph, as being indefinite for the same reason. Applicants respectfully traverse the objection and § 112, second paragraph, rejection insofar as they may be applied to the claims as amended.

Dependent claims 2-10, 12-15, and 17-19 have been amended to recite the same statutory class of subject matter as compared with the independent claims from which such dependent claims depend. Thus, Applicant respectfully submits that such claims are now of proper dependent form and definite and accordingly, Applicant respectfully requests reconsideration and withdrawal of the objection and § 112, second paragraph, rejection.

The Examiner has also rejected independent claim 1 under 35 USC § 112, second paragraph, as being indefinite for employing the word instantiate, which the Examiner states is not clear. Applicants respectfully traverse the § 112, second paragraph, rejection of claim 1.

Applicant points out that the term ‘instantiate’ as used in the phrase ‘the tool being instantiated on at least one computer’ of claim 1 is intended to mean that the tool is created or otherwise formed on at least one computer, and in particular is created in the manner of a computer construct residing in a memory of the computer or the like. Moreover, Applicant respectfully submits that the use of such term ‘instantiate’ in such manner is generally known or should be apparent to the relevant public knowledgeable in the way of computers and computer applications.

The Examiner states that in light of the specification, “it seems that any computer application instantiated on any computer system may be employed to carry out the forecasting tool.” However, Applicant respectfully disagrees, and instead points out that a computer application instantiated on a computer system may be employed to carry out the forecasting tool only if such computer application and such computer system together provide all structure and functionality necessary to carry out the forecasting tool, and especially all structure and functionality as recited in the claims of the present application, and only if such computer application and such computer system are appropriately programmed and provided with data to in fact instantiate the forecasting tool. Thus, although a user may manually create the tables of the forecasting tool with a database application such as MICROSOFT EXCEL, such tables may also be at least partially automatically generated, for example by way of an appropriate aggregation application. Thus, Applicant respectfully submits that

claim 1 is indeed definite and accordingly, Applicant respectfully requests reconsideration and withdrawal of the § 112, second paragraph, rejection of such claim 1.

The Examiner has rejected the claims of the present application under 35 USC § 103 as being obvious over Gleditsch et al. (U.S. Patent No. 6,415,194) in view of MICROSOFT EXCEL spreadsheets. Applicants respectfully traverse the § 103 rejection.

As was previously pointed out, independent claim 1 recites a computer-readable medium having stored thereon computer-executable instructions for instantiating a forecasting tool for predicting future demand for quantifiable items in connection with a plurality of projects. The tool is instantiated on at least one computer in the form of a database having multiple tables, where each table has information therein. A project table has project information for each project, where the project information includes a reference to items to be employed in connection with the project. An item table has item information for each item referenced by the project table, where the item information includes a reference to an algorithm to be employed to determine a quantity of the item for a particular project. An algorithm table has algorithm information for each algorithm referenced by the item table.

As amended, claim 1 also recites that the tables further comprise a requirements table populated by the forecasting tool on a dynamic basis with information obtained from the tables in response to a query for demand for items. Thus, the tool populates the requirements table by accepting the query, traversing the tables of the database according to the query to accumulate data necessary to populate the requirements table, and in fact populating the requirements table based on the accumulated data.

Independent claim 16 recites a computer-readable medium having stored thereon computer-executable instructions for performing a method of employing a forecasting tool

such as that recited in connection with claim 1. In the method, the tool receives a query for demand for an item and in response to the query populates a requirements table on a dynamic basis with information from the tables. In particular, the tool accepts the query, traverses the tables of the database according to the query to accumulate data necessary to populate the requirements table, and in fact populates the requirements table based on the accumulated data.

In the course of the tool traversing the tables and accumulating the data, an item needed for a project is determined from a project table having project information for each project, where the project information includes a reference to items to be employed in connection with the project. Likewise, an algorithm necessary to determine a quantity of a needed item is determined from an item table having item information for each item referenced by the project table, where the item information includes a reference to an algorithm to be employed to determine a quantity of the item for a particular project. Also, specifics of a necessary algorithm are determined from an algorithm table having algorithm information for each algorithm referenced by the item table. Any inputs necessary for an algorithm are determined from each table as necessary, and the inputs are applied to the algorithm to determine the quantity of the needed item.

Again, the present invention as set forth in the claims is directed in particular (but by no means exclusively) to a relatively complex and/or ongoing project, where it is very useful to be able to predict future demand for materials, parts, and equipment and the like. Accordingly, such materials can be ordered from appropriate suppliers and received in a timely manner.

Oftentimes, such materials include not only materials that are quite evident, but also other materials that are not nearly as evident but that are still necessary. For example, in a construction job requiring a particular amount of bricks, it is also necessary to have a particular amount of mortar to lay the bricks. Regardless, all such materials optimally should be ordered and received in a manner such that the materials are neither too early or too late relevant to when such materials are needed. As should be understood, then, in the aforementioned relatively complex and/or ongoing project, and in other typical projects, it can become a mammoth undertaking to plan for materials for such projects, as well as for other project needs including labor needs and other support needs. Accordingly, the present invention is directed toward a forecasting tool that accurately predicts future demand for parts / materials / equipment in connection with an ongoing project or operation or the like, where such forecasting tool predicts such demand based on factors including historic demand, supplier availability, project requirements, and the like.

As set forth in the claims of the present application, the forecasting tool is based at least in part on a number of tables, including a project table that has project information for each project, where the project information includes a reference to items to be employed in connection with the project; an item table that has item information for each item referenced by the project table, where the item information includes a reference to an algorithm to be employed to determine a quantity of the item for a particular project; and an algorithm table that has algorithm information for each algorithm referenced by the item table. Thus, such tables each contain particular data arranged in a particular manner and such tables are inter-related in a particular manner deemed beneficial to the forecasting tool. Put another way,

such tables are not merely data that can be manually entered by a user without regard for inter-relations that are expected by the forecasting tool.

Moreover, the forecasting tool includes not only the aforementioned tables, but a requirements table that the forecasting tool populates on a dynamic basis with information obtained from the tables in response to a query for demand for items. Thus, the tool populates the requirements table based on the query by traversing the tables of the database according to the query to accumulate data necessary to populate the requirements table. That is, even if a user were to manually enter data into the tables of the database, the forecasting tool still is necessary to accept a query, traverse the tables based on the query to collect data, and then populate the requirements table based thereon, as is required by the claims of the present application.

As was previously pointed out, the Gleditsch reference discloses a system and method by which demand for a manufacturing resource is scheduled in response to a customer order for a product. The system and method includes means for tracking scheduled finished goods orders, existing finished goods inventory, past due finished goods orders, unallocated customer orders and marketing orders, and the manufacturing lead time for the product, among other manufacturing process parameters. The customer order amount and the date requested for the order are entered, and depending on whether the date requested is inside, equal to or outside the manufacturing lead time, manufacturing resources are consumed from one or more of the scheduled finished goods orders, existing finished goods inventory, available to promise amounts, past due finished goods orders, unallocated customer orders, marketing orders, and high flex amounts.

As principally noted by the Examiner, the Gleditsch reference at column 3, line 50 through column 4, line 33 discloses calculating when certain amounts of raw materials or other manufacturing resources are going to be needed based on when a customer order needs to be filled, determining the date when a manufacturer needs to purchase or produce raw materials, allocating and scheduling manufacturing resources, and the like. Such passage also discloses that the system includes a database for storing predefined parameters, information about customer orders, and historical data.

However, and as the Examiner concedes, the Gleditsch reference utterly fails to recognize that information in the Gleditsch system should or could be organized according to tables, including a project table having project information for each project, where the project information includes a reference to items to be employed in connection with the project, an item table having item information for each item referenced by the project table, where the item information including a reference to an algorithm to be employed to determine a quantity of the item for a particular project; and an algorithm table having algorithm information for each algorithm referenced by the item table, all as required by claims 1 and 16.

Likewise, and as the Examiner also concedes, the Gleditsch reference utterly fails to recognize that any such tables should or could be employed by determining an item needed for a project from a project table, determining an algorithm necessary to determine a quantity of a needed item from an item table, determining specifics of a necessary algorithm from an algorithm table, obtaining any inputs necessary for the algorithm from each table as necessary, and applying the inputs to the algorithm to determine the quantity of the needed item, all as required by claim 16.

Nevertheless, the Examiner argues that it would be obvious to employ a database such as a MICROSOFT EXCEL spreadsheet to provide tables to organize the Gleditsch information. However, Applicant respectfully points out that even if it would be obvious to organize the Gleditsch information in tables such as EXCEL spreadsheet tables, neither the Gleditsch reference nor an EXCEL spreadsheet discloses or suggests organizing the Gleditsch information in tables having the particular structure as recited in claims 1 and 16. That is, that the present invention as recited in claims 1 and 16 requires that the information stored in the tables include specific references between such tables. In particular, the recited project table of such claims must have project information for each project, where the project information includes a reference to items to be employed in connection with the project; the recited item table of such claims must have item information for each item referenced by the project table, where the item information includes a reference to an algorithm to be employed to determine a quantity of the item for a particular project; and the recited algorithm table of such claims must have algorithm information for each algorithm referenced by the item table. Clearly, neither the Gleditsch reference nor an EXCEL spreadsheet alone or combined discloses or suggests such specific requirements of claims 1 and 16.

Moreover, Applicant respectfully points out that neither the Gleditsch reference nor an EXCEL spreadsheet discloses or suggests that with the tables having the particular structure as recited in claims 1 and 16, a forecasting tool should or could employ a requirements table that the forecasting tool populates on a dynamic basis with information obtained from the tables in response to a query for demand for items, as is required by claims 1 and 16, or that the tool should or could populate the requirements table based on the query

by traversing the tables of the database according to the query to accumulate data necessary to populate the requirements table, as is also required by claims 1 and 16.

More to the point, since the present invention relies on such tables and references and a tool populating a requirements table based on traversing such tables, Applicant respectfully submits that the Examiner cannot make a prime facie case of obviousness merely by asserting that it would be obvious to store the Gleditsch information in tables such as EXCEL spreadsheet tables, as is the case in connection with the present rejection. Instead, Applicant respectfully submits that the Examiner instead must point to a reference that discloses using tables in a manner akin to that which is recited in the claims of the present application. Applicant respectfully submits that the Examiner has not done so, and for this reason asserts that the combination of the Gleditsch reference and an EXCEL spreadsheet table fails to suggest or hint at the forecasting tool and method of using same as recited in claims 1 and 16.

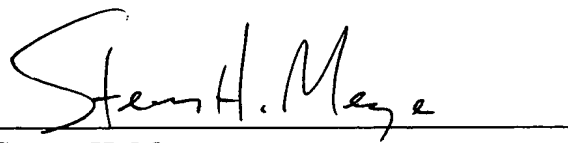
Thus, Applicant respectfully submits that such references do not make obvious such claims 1 and 16 or any claims depending therefrom including claims 2-15 and 17-19. Instead, Applicant respectfully submits that such claims are not in fact obvious in view of such references, and accordingly, Applicant respectfully requests reconsideration and withdrawal of the § 103 rejection.

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In view of the foregoing discussion, Applicant respectfully submits that the present application including claims 1-10 and 12-20 is in condition for allowance, and such action is respectfully requested.

Respectfully Submitted,

A handwritten signature in black ink, appearing to read "Steven H. Meyer", is written over a horizontal line.

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